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AUTHOR Dobson, John R. A.
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ABSTRACT

This study describes the problems of searching in professional journals for relevant articles on the subject of adult education evaluation. Seventy-three journals were identified as containing 337 appropriate articles when searching with 11 title words; 43 percent of the titles referred to human behavior change while 57 percent referred to program development. Title function words, "who," "what," "why," "where," "when," and "how," were tabulated. Methodology, practice, and issue words were examined, as were the words suggesting evaluative techniques and instruments. A microthesaurus suggesting method, technique, and instrument was prepared. Search strategies using function words and key title words were recommended to adult educators. Criteria for clearly titling journal articles were recommended to authors. (Author)

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THE PROBLEM OF JOURNAL SEARCHING; THE CASE OF RETRIEVING ADULT EDUCATION EVALUATION ARTICLES.

JOHN R A DOBSON
ST. FRANCIS XAVIER UNIVERSITY

Abstract

This study describes the problems of searching in professional journals for relevant articles on the subject of adult education evaluation. Seventy three journals were identified as containing 337 appropriate articles when searching with eleven title words; 43% of the titles referred to human behavior change while 57% referred to program development. Title function words, "who," "what," "why," "where," "when" and "how," were tabulated. Methodology, practice and issue words were examined, as were the words suggesting evaluative techniques and instruments. A microthesaurus suggesting method, technique and instrument was prepared. Search strategies using function words and key title words were recommended to adult educators. Criteria for clearly titling journal articles were recommended to authors.

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Problem Statement

Adult educators often have considerable difficulty identifying the articles relevant to their particular subject of interest. This is especially true for the practitioner who does not search frequently in professional journals for articles of substance. The problem is not only one of knowing which journals contain articles in adult education, but also one of deciding what the contents of a particular article might be on the basis of the words in the title. The problem of knowing the meaning of words frequently used by researchers and other professionals is aggravated by the lack of consistency in usage of adult education terminology. This is not a new problem for educators. Goodman observed in 1972 that:

> Education does not now appear to be characterized by a singular profession, a singular discipline, or monolithic institutions. Pluralism is the order of the day. Professional organizations proliferate; adherents of one discipline after another appear and argue the advantages of a particular approach, the attractiveness of a different conceptual framework; institutions which until recently seemed quite venerable are attacked from all sides. (Goodman, 1972)

The words of a title to an adult education article are the keys provided by the author to prospective readers summarizing the ideas and experiences contained in the body of the paper. The title serves as a primary retrieval system which allows for information collected and articulated in writing by one person to be retrieved by another. Descriptor terms are the keys created by document cataloguers in order to provide for an alternative retrieval system in the information gathering process. The current state of the art of the profession of adult education is reflected in the vocabulary created by both authors and cataloguers.

There are basically two approaches to information retrieval: through the examination of title words, and through the searching for concepts in appropriate thesauri of descriptor terms. Each approach attempts to provide searchers with sufficient information to permit a decision to be made as to the relevance of the particular document. A disadvantage in title word searching is that the key words provided are either insufficient to make a judgement or are so creatively innovative as to be inconclusive. On the other hand, a disadvantage in descriptor searching is that key terms used attempt to categorize a particular article within the conventions set down by an institutional authority. This often does not allow for the dynamic developments taking place within the field of inquiry. Again, Goodman observed:

> A great many terms are necessary to describe the many aspects of education, and the task of relating them

> in even an approximately consistent way is an enormous one. The undertaking should be managed by people who not only know what they are talking about but who also should be able to predict what people in their field are likely to be talking about in the near future. It should also enlist people who are willing to pay a great deal of attention to the details of relating one term to another within the system. (Goodman, 1972)

A second disadvantage in descriptor searching is that the practitioner, unlike the researcher, is generally unfamiliar with the several thesauri available in reference collections.

An analysis of title words and descriptor terms found in recent adult education evaluation articles will assist practitioners in their quest for information.

Literature

The basic references for adult educators seeking a relevant professional vocabulary are:

The Encyclopedia of Education
Thesaurus of ERIC Descriptors
Thesaurus of Development Communications
OECD Macrothesaurus: Economic and Social Development
MSU Non-formal Education Thesaurus

In addition to these there are several subject heading indices based upon the Library of Congress or Dewey cataloguing system.

These thesauri build their literature search strategies on artificially controlled words categorized as broad (BT), narrow (NT) and related (RT) terms, as well as alphabetized rotated listings.

The OECD Macrothesaurus provides a guide to broad and narrow terms used in the social sciences, including education, but due to the wide scope of its topics does not allow for much specificity in searching for a subject as narrow as "adult education evaluation." Indeed, the only descriptive narrow terms that were useful in searching were "methods," "techniques," "evaluation," "research," and "analysis" when cross-referenced with "adult education."

When using the ERIC Thesaurus a wider variety of narrow terms were available as suggested search words. These included 23 techniques of analysis, 3 of evaluation, 3 of assessment, 2 of research and 4 of surveying. (See Table 7.)

All the thesauri reviewed relied heavily on the use of a non-educational subject descriptor to reduce the search field.

While there is considerable literature dealing with the structure and procedures used in creating thesauri of descriptors "very little is known about the people who have been using the ERIC Thesaurus, why and how they have been using it, and what they think of it." (Goodman, 1972)

During the past several months students in the Department of Adult Education at St. Francis Xavier University have been searching for articles relevant to the profession. Close to 3000 articles were identified in 73 journals published in 1981 and 1982. The articles were catalogued on an HP3000-300 computer using the MINISIS information management system. The inverted file capability of the system allows for both title and descriptor search strategies.

The Department's database is used by students, researchers and practitioners alike as the source of written information on the theory and practice of adult education. Students with sufficient available time, and researchers with considerable knowledge have little difficulty in retrieving information on their particular topic. Practitioners, on the other hand, with less time to search and virtually no knowledge of the variety of synonomous terms have considerable difficulty in accessing the literature. Goodman has noted that:

> One of the major questions to be answered about Thesaurus use is the extent to which it may be utilized to aid the kind of search performed by a professional searcher acting as an intermediary between the actual user and the system. It may be that a great many future searches of the system will involve an intermediary person. This possibility should not be viewed simply as an aid to the user; it should also be viewed as a potentially inevitable barrier between the user and the system. In the

> first instance one can contemplate a highly valuable interface between a naive user and the complex system, an interface in the form of a searcher who translates between the user's natural language and the system's artificially controlled language. (Goodman, 1972)

An alternative to the growing mystification of the professional language of adult education is the development of easy to use search strategies that can be applied to the words of the title in such a way as to provide ready access to relevant information. Adult education has traditionally been characterized by its practical approach to learning, consequently any effort to demystify the profession is to be valued.

Objectives of Study

This study examines the problem of determining the appropriateness of title words as guides to the selection of articles written on the topic of adult education evaluation. It suggests to practitioners ways of approaching the problem of literature search and to authors ways of titling their work so as to make it readily accessible.

The objectives of this study are:

1. To identify relevant adult education journals with articles on evaluation;

2. To identify relevant evaluation words;

3. To categorize words of a title according to their function;

4. To analyze evaluation method, technique and instrument words;

5. To suggest appropriate title search strategy for the topic of evaluation; and

6. To suggest appropriate title writing criteria.

Definitions

1. Evaluation: the determining, or setting, of value;

2. Function: the purpose for which something is designed or exits;

3. Instrument: a device for measuring the present value of the quantity under observation [synonym: tool];

4. Method: a plan or system of action, inquiry, analysis, etc.

5. Research: systematic inquiry into a subject in order to discover or revise facts, theories, etc.;

6. Search: to explore or examine in order to discover;

7. Technique: the body of specialized procedures used in any specific field.

Methodology

The methodology used to identify relevant articles and words was developmental.

1. Journals in the social sciences were searched to render articles in adult education;

2. A cluster of words suggesting that the article was related to evaluation were identified;

3. Article abstracts were reviewed to determine suitability;

4. Evaluation title words were categorized as to function: "what," "who," "why," "where," "when" and "how;"

5. "Why" evaluation words were categorize as guides to methodology, practice and current issues;

6. "How" evaluation words were categorized as to methods, techniques, and instruments;

7. A microthesaurus of evaluation related words was prepared.

Findings and Discussion

The findings have been placed in tables at the end of the paper. The following discussion attempts to highlight certain features of the data.

1. Journals with articles in adult education evaluation. (See Table 1.)

Seventy three journals containing 2977 adult education articles published in 1981-82 were searched; 51 contained 324 evaluation articles; DEVSIS contained 101; ERIC was unavailable for searching on the informational retrieval system at the time of

the study. Journals with the largest number of "hits" on evaluation were those related either to community development or to human resources training. Journals in general education and in the social sciences containing adult education evaluation articles were few.

2. Evaluation words used to suggest method. (See Table 2.)

Eleven words were considered to be synonymous with evaluation; 5 words were most frequently (88%) used to suggest that the article was referring to evaluation; the 6 other words appeared less frequently (12%). Although the word "research" appeared in 25% of the titles it was redundant with another evaluation word in 20% of the references. The distribution of title words between the "analysis" of human performance (43%) and the "evaluation" of programs (57%) was a very interesting finding.

3. Function words in titles. (See Table 3.)

"What" kind of evaluation took place and "how" it was conducted appeared frequently, "who" and "where" less frequently, while "why" and "when" were seldom manifested in the title.

Using the "why" function to mean "why write a report" made it a useful approach for identifying (77%) guides to methodology, practice and current issues.

The use of "who" and "where" words, although limited (38%), provided a context to the article in question. The designation of people of a class or type ("who") clearly limited the study to

a target population which was readily defineable. Title words designating "where" the evaluation took place often was a substitute to "who" serving the same purpose of targeting the population being evaluated.

"When" the evaluation took place was generally absent from the title.

4. Title words suggesting methodology, practice and issues. (See Table 4.)

Title words often, but not always (77%), gave the reason why the article was written.

Words suggesting that the article focuses on how to conduct an evaluation were varied. Twenty two different words pointed to articles on methodology (44%). Words such as "approach," "strategy" and "system" referred to general articles on methods while words such as "techniques," "levels," "steps" and "tactics" usually referred to the specifics of evaluation procedure.

The practice of evaluation is generally referred to in the title (20%) when such words as "report", "project", and "program" appear. There are only a few evaluation reports found in journals. The DEVSIS and ERIC information systems are more frequently the repository of reports.

Current issues in evaluation were infrequently (13%) suggested by words in the title. Words such as "roles", "problems",

"concepts", "policies" and "issues" pointed to articles which discussed the current state of evaluation.

5. Title words suggesting quantitative, qualitative, participatory, formative and summative evaluation techniques. (See Table 5.)

Evaluation titles were required to include one of the eleven method words in order to be considered in this study. In addition to one of these general words the titles also included a second word which suggested a particular approach, or technique, being used in evaluation. The words describing technique divided into "quantitative," "qualitative," "participatory," "formative" and "summative" evaluation approaches. There was, however, considerable overlapping in approach between qualitative and participatory as well as between formative and summative techniques.

6. Title words suggesting evaluation instruments. (See Table 6.)

An evaluation title often had an alternative second word suggesting an instrument (36%). Words such as "survey" and "test" were used so frequently that they often stood alone in a title to suggest a method in themselves.

7. A micro-thesaurus of evaluation related words. (See Table 7.)

One hundred and forty-one words were identified from titles and/or thesauri that suggested some aspect -- method, technique or instrument -- of evaluation. Of the total, 29 were terms drawn from the Thesaurus of ERIC Descriptors. Only two of the ERIC terms were found in the titles searched !

Conclusions

1. Apart from those journals whose purpose it is to disseminate evaluation research there are numerous other serials which publish evaluation information occasionally. Collectively, these latter journals offer the reader half of the total number of references on the subject.

The International Development Research Centre's DEVSIS collection and the ERIC Clearinghouse on Adult, Career and Vocational Education provide the major resources for reports on the practice, issues and methods used in evaluation.

2. Identification of appropriate articles by using key evaluation words in a title is a valuable strategy to follow when searching for information.

3. The selection of function words in a title is a useful strategy for identifying the "what", "how", and "who/where" of the evaluation. It is also useful in determining the purpose, "why", of the article. It was not useful in identifying the "when" of an evaluation.

4. A thesaurus of descriptors is a helpful support when searching for articles which have been incompletely or inappropriately titled, however, it is not as useful as the solitary source of searching words.

Recommendations

The recommendations resulting from this study are directed primarily to the practitioner who is searching for relevant articles and to authors who want to make their work more accessible.

1. The adult educator seeking to identify appropriate evaluation articles without the aid of computer searching facilities would do best to review journals in community development, adult education and human resources training, and use the nine title key evaluation words as a guide to selection.

2. The adult educator with access to searching facilities should enter the activity with a sense of exploration. The process of selection becomes, in itself, a vocabulary learning experience. The first selection of titles will probably be inadequate, and successive passes at the database will gradually render the information being sought.

3. A search strategy to follow should be to select the broadest terms that seem appropriate to the topic and try to identify 300 to 500 "hits". The mini-database so created should then be cross-referenced according to the guide words suggested for each of the six function categories. The sets of titles by category

should render between 10 and 20 hits each; these then can be perused. When perusing a set of "hits" the secondary adjective words which describe, or modify, the primary evaluation words should be the focus of the search. Eventually, the articles appropriate to the interest of the adult educator will emerge. One hour is not an uncommon length of time to spend searching for 15 to 30 articles of interest.

4. The authors of journal articles should consider that the title is the primary resource that an adult educator has for retrieving the contents of their work. Although clever or creative titles are attractive to an "in group" of readers who are current knowledge of the trends and authors found in particular journals, such titles generally exclude the casual reader. The title should be written in plain English.

5. Authors should include a combination of words in the title which tell the prospective reader what is being evaluated, how it is being evaluated and why it is being evaluated. Other function words should be included when the target population, or the location, or the time are the principle subject being evaluated.

Bibliography

Alexander, Carter and Arvid J. Burke. HOW TO LOCATE EDUCATIONAL INFORMATION AND DATA. Fourth Edition. New York: Teachers College Press, 1958.

American Library Association. ANGLO-AMERICAN CATALOGUING RULES. Chicago: American Library Association, 1978.

Blistien, Edward (ed). ENCYCLOPEDIA OF EDUCATION. New York: Philosophical Library, 1970.

Brace, Judy and Happy Copley. THESAURUS OF DEVELOPMENT COMMUNICATIONS. Washington: Academy of Educational Development, 1981.

Denver Research Institute. DEVELOP SEARCH SERVICE. Denver: Denver Research Institute, 1982.

Dobson, John R.A. A DATABASE MANAGEMENT SYSTEM FOR CANADIAN ADULT EDUCATION STUDIES. Paper accepted for presentation at the Canadian Association for Studies in Adult Education Conference. Vancover: CASAE, 1982.

Dierickx, Harold. REFERENCE MANUAL FOR MACHINE-READABLE BIBLIOGRAPHIC DESCRIPTIONS. Paris: UNESCO, 1981.

Educational Resources Information Center. THESAURUS OF ERIC DESCRIPTORS. Seventh Edition. Washington: National Institute of Education, 1977.

Engineers Joint Council. THESAURUS RULES AND CONVENTIONS. New York: The Council, 1966.

Goldwyn, A.J. and others. THE PREPARATION OF A THESAURUS OF EDUCATIONAL TERMS, FINAL REPORT. Cleveland: Western Reserve University, 1966.

International Organization for Standardization. INFORMATION TRANSFER: HANDBOOK ON INTERNATIONAL STANDARDS GOVERNING INFORMATION TRANSFER. Geneva: ISO, 1977.

Library of Congress. SUBJECT HEADINGS. Edited by Marguerite V. Quattlebaum. Washington: Library of Congress, 1966.

Morin-Labatut, Gisele and Maureen Sly. MANUAL FOR THE PREPARATION OF RECORDS IN DEVELOPMENT - INFORMATION SYSTEMS. Ottawa: International Development Research Centre, 1983.

Office of Education. RULES OF THESAURUS PREPARATION. Washington: Office of Education, 1966.

U.S. Air Force. EDUCATIONAL TERMS BY GENERAL AREAS OF STUDY, MAJOR ACADEMIC FIELDS, SPECIALIZATIONS, AND SUBSPECIALIZATIONS. Montegomery: Air Force Base, 1967.

Viet, Jean. MACROTHESAURUS FOR INFORMATION PROCESSING IN THE FIELD OF ECONOMIC AND SOCIAL DEVELOPMENT. Paris: OECD, 1978.

TABLE ONE:
JOURNALS WITH ARTICLES IN ADULT EDUCATION EVALUATION
1981 - 1982

	Adult Ed.	Eval-uation
ADULT EDUCATION	47	14
ADULT EDUCATION (GREAT BRITAIN)	34	2
ADULT EDUCATION (UNESCO)	-	-
ADULT EDUCATION (UNITED STATES)	27	9
ADULT EDUCATION AND DEVELOPMENT	14	2
ADULT EDUCATION IN FINLAND	-	-
ALBERTA JOURNAL OF EDUCATIONAL RESEARCH	4	2
AMERICAN JOURNAL OF SOCIOLOGY	1	0
AUSTRALIAN JOURNAL OF ADULT EDUCATION	27	1
BRITISH JOURNAL OF EDUCATIONAL PSYCHOLOGY	3	0
BRITISH JOURNAL OF EDUCATIONAL STUDIES	1	0
BRITISH JOURNAL OF EDUCATIONAL TECHNOLOGY	1	0
CANADIAN ADMINISTRATOR	2	1
CANADIAN COUNSELLOR	13	0
CANADIAN JOURNAL OF EDUCATION	6	0
CANADIAN JOURNAL OF HIGHER EDUCATION	7	1
CANADIAN JOURNAL OF SOCIOLOGY	3	1
CHANGE: MAGAZINE OF HIGHER LEARNING	20	3
CLEARING HOUSE	3	0
COMMUNITY COLLEGE REVIEW	8	2
COMMUNITY DEVELOPMENT JOURNAL	327	24
COMPARATIVE EDUCATION REVIEW	8	3
CONTACT	67	3
CONVERGENCE	119	12
COUNSELLING AND HUMAN DEVELOPMENT	4	1
CTH: THE HUMAN ELEMENT	4	1
DELTA PI EPSILON	5	1
DEVELOPMENT DIALOGUE	95	7
DEVELOPMENT DIGEST	88	13
ECONOMIC DEVELOPMENT AND CULTURE CHANGE	149	19
EDUCATION AND TRAINING OF MENTALLY RETARDED	1	0
EDUCATIONAL COMMUNICATION AND TECHNOLOGY	86	20
EDUCATIONAL RESEARCH	65	10
EDUCATIONAL TECHNOLOGY	119	20
EDUCATIONAL THEORY	15	3
EVALUATION U. S. REVIEW	7	7
GROUP AND ORGANIZATIONAL STUDIES	72	12
HARVARD EDUCATIONAL REVIEW	11	3
HUMAN RELATIONS (UNITED STATES)	68	12
INDIAN JOURNAL OF ADULT EDUCATION	6	0
INFOSYSTEMS	4	0
INTERNATIONAL DEVELOPMENT REVIEW	408	16
INTERNATIONAL JOURNAL OF INTERCULTURAL RELATIONS	77	15
INTERNATIONAL REVIEW OF EDUCATION	3	1
JOURNAL OF CURRICULUM STUDIES	5	1
JOURNAL OF CURRICULUM THEORIZING	9	1
JOURNAL OF EDUCATION	3	0

JOURNAL OF EDUCATIONAL MEASUREMENT	6	1
JOURNAL OF EDUCATIONAL RESEARCH	19	5
JOURNAL OF EDUCATIONAL THOUGHT	3	0
JOURNAL OF EXPERIMENTAL EDUCATION	4	0
JOURNAL OF EXTENSION	10	0
JOURNAL OF HUMANISTIC PSYCHOLOGY	48	3
JOURNAL OF READING	7	2
JOURNAL OF SOCIAL ISSUES	7	3
JOURNAL OF SPECIAL EDUCATION	3	1
JOURNAL OF THE COMMUNITY DEVELOPMENT SOCIETY	10	2
LIFELONG LEARNING (ADULT LEADERSHIP)	56	3
MCGILL JOURNAL OF EDUCATION	2	0
MEASUREMENT AND EVALUATION IN GUIDANCE	3	3
PEABODY JOURNAL OF EDUCATION	5	3
PERSONNEL AND GUIDANCE JOURNAL	11	0
PHI DELTA KAPPAN	8	0
PROGRAMMED LEARNING AND EDUCATIONAL TECHNOLOGY	99	15
RESEARCH IN HIGHER EDUCATION	5	0
REVIEW OF EDUCATIONAL RESEARCH	7	4
SOCIAL ACTION	265	32
TEACHERS COLLEGE RECORD	21	0
TEACHING AT A DISTANCE	6	1
THEORY INTO PRACTICE	0	0
THIRD WORLD QUARTERLY	495	32
TRAINING AND DEVELOPMENT JOURNAL	301	32
TRAINING: HUMAN RESOURCES DEVELOPMENT	35	2

TABLE TWO:
EVALUATION WORDS SUGGESTING METHOD
CROSS-REFERENCED WITH HUMAN BEHAVIOR AND PROGRAMMING

	HUMAN BEHAVIOR	PROGRAM PRE-	PROGRAM POST-	TOTAL	%
JUDGEMENT	4*	0	0	4	+
APPRAISAL	5	0	1	6	+
MEASUREMENT	6	0	2	8	+
OBSERVATION	8	0	0	8	+
SURVEY	2	10	0	12	+
TEST	13	9	7	29	12%
ASSESSMENT	24	20	12	56	9%
EVALUATION	20	28	53	101	17%
CASE STUDY	27	0	80	107	18%
ANALYSIS	77	17	20	114	19%
RESEARCH	75	20	54	149	25%
	(261)	(104)	(229)	(594)	
	43%	57%			(100%)

TABLE THREE:
FUNCTION WORDS IN TITLES

"Who" was being evaluated:	
People of a type or class	20%
"What" was being evaluated:	
Human behavior	43%
Program planning	19%
Program outcome	38%
	(100%)
What learning content was being evaluated:	
ABE, literacy, life skills	2%
Vocational, economic development	6%
Social welfare, human services	2%
Health, nutrition, fitness	2%
Culture, art, folklore, religion	1%
	(13%)
"Why" report on evaluation:	
Guides to method	44%
Current issues	13%
Practice	20%
	(77%)
"When" the evaluation took place	3%
"Where" the evaluation took place	
In a learning environment	10%
Informal 2%	
Non-formal 3%	
Skill training 4%	
Formal 1%	
In an organization	8%
In a community	8%
In a geographic locale	2%
	(28%)
"How" was the evaluation carried out:	
Method	100%
Technique	34%
Instrument	36%

TABLE FOUR:
GUIDE WORDS SUGGESTING METHODOLOGY, PRACTICE AND ISSUES.

Methodology					
ELEMENTS	2*	DECISION	7	MODELS	18
KIT	2	DESIGN	7	DESIGN	22
SCHEME	2	FRAMEWORK	8	GUIDE	27
PROCEDURES	3	HANDBOOK	10	PRACTICE	27
TACTICS	4	FORM	11	SYSTEM	28
STEPS	5	HOW	12	TECHNIQUES	33
LEVELS	6	PROCESS	14	STRATEGY	36
				APPROACH	40
Practice					
OUTCOME	2	SUMMARY	10	PROJECT	47
PRODUCT	9	REPORT	30	PROGRAM	105
Issues					
VIEWPOINT	1	CHALLENGES	3	ISSUES	10
PRIORITIES	2	PRINCIPLES	4	POLICIES	12
PROFILE	2	TRENDS	5	CONCEPTS	13
TERMS	2	DEFINITIONS	9	PROBLEMS	17
				ROLES	20

*Frequency count.

TABLE FIVE:
WORDS SUGGESTING QUANTITATIVE, QUALITATIVE, PARTICIPATORY, FORMATIVE AND SUMMATIVE TECHNIQUES.

Qualitative Techniques		
BASIC	EXPERIMENTAL	POOLED
CENSUS	FACTOR	PURE
COMPETENCY	ITEM	QUANTITATIVE
COST-	LONGITUDINAL	RATING
CRITERION-	NOMINAL	RESPONSE
DIFFERENTIAL	OBJECTIVE	SAMPLE
EFFICIENT	OPTIMAL	SYSTEMATIC
EMPIRICAL	PATTERN	TREATMENT
Qualitative Technique		
ATTITUDE	EFFECTIVE	MULTI-LEVEL
COMPARATIVE	EXPERIMENTAL	OPTIMAL
CONDITIONAL	FIRST-HAND	PRACTICAL
CONTEXT	MULTI-DIMENSIONAL	QUALITATIVE
		SIMULATION
Participatory Technique		
COMMUNITY	GROUP	PARTICIPATORY
CUSTOMIZED	INTERACTION	SELF-
DELPHI	INTERVENTION	TRANSACTIONAL
Formative Technique		
ANTECEDENT	ESTIMATION	PLANNING
ANTICIPATORY	FRONT-END	PREPARATIVE
BACKGROUND	GIFT-HORSE	PROBE
CONTINGENCY	INTRODUCTORY	PROBLEM
CONTINUING	MONITOR	SKILLS
DAILY	NEEDS	TRANSITIONAL
DEVELOPMENTAL	PERFORMANCE	
Summative Technique		
ACHIEVEMENT	KNOWLEDGE	PROJECT
COGNITIVE	OUTCOME	RESULTS
CONTENT	PRODUCT	SUCCESS
INSTRUCTIONAL	PROGRAM	TRAINING

TABLE SIX:
TITLE WORDS SUGGESTING EVALUATION INSTRUMENTS

FORM	SCALE	TAXONOMY
INSTRUMENT	SURVEY	TYPOLOGY
QUESTIONAIRE	TEST	UNOBTRUSIVE
RELIABILITY	TOOL	VALIDITY

TABLE SEVEN:
A MICROTHESAURUS SUGGESTING EVALUATION METHOD, TECHNIQUE OR INSTRUMENT

ACHIEVEMENT	# 14	EFFICIENCY	10	PLANNING	
ACTION	*	EMPIRICAL	6	POOLED	
ANALYSIS	114 *	ERROR	*	PRACTICAL	
ANTECEDENT	2	ESTIMATION	13	PREPARATIVE	3
ANTICIPATORY	+	EVALUATION	101 *	PROBE	
APPRAISAL	6 *	EXPERIENTIAL	5	PROBLEM	
ASSESSMENT	56	EXPERIMENTAL	10	PRODUCT	9
ATTITUDE		FACTOR	6 *	PROFILE	*
BACKGROUND		FIRST-HAND		PROGRAM	105
BASIC		FORM	12	PROJECT	47
CASE STUDY	107	FORMATIVE	*	PURE	
CENSUS	5	FRONT-END		QUALITATIVE	3
CLUSTER	*	GIFT-HORSE		QUANTITATIVE	9
COGNITIVE	6	GROUP		QUESTION-	28
COHORT	*	INFORMAL	*	RATING	2
COMMUNITY	*	INPUT	*	REGRESSION	*
COMPARATIVE	*	INSTRUCTIONAL		RELIABILITY	
COMPARATIVE	17	INSTRUMENT	8	RESEARCH	149 *
COMPETENCE	22	INTERACTION	*	RESPONSE	4
COMPONENTIAL	*	INTERCULTURAL		RESULTS	
CONDITIONAL		INTERVENTION		REVIEW	
CONTENT	*	INTRODUCTORY		ROLE	
CONTEXT	5	ITEM	*	SAMPLE	
CONTINGENCY		JUDGEMENT	4	SCALE	14
CONTINUING		KNOWLEDGE		SELF-	16
COST-	15	LONGITUDINAL		SIMULATION	
COST-BENEFIT		MAIL		SOCIAL	
COST-EFFECTIVE		MEASURE	8	SPATIAL	
COST-EFFICIENT		MEMORY		STATISTICAL	*
COVARIANCE	*	MODEL		STUDY	83
CRITERION-REFERENCE		MONITOR	4	SUCCESS	
CROSS-	3	MOTIVATIONAL		SUMMATIVE	*
CROSS-CULTURAL		MULTIDIMENSIONAL		SURVEY	12
CROSS-GENDER		MULTILEVEL		SYSTEMATIC	
CROSS-SECTION		NEEDS	67 *	SYSTEMS	*
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EFFECTIVE	33	PERFORMANCE	13	VALIDITY	2
				VARIANCE	*

* Items listed in the Thesaurus of ERIC Descriptors.
\# number of hits realized during the evaluation search.
\+ Items where only one hit was realized.